INDIAN SCHOOL MUSCAT
FINAL TERM EXAMINATION

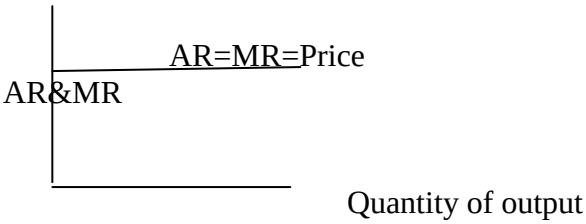
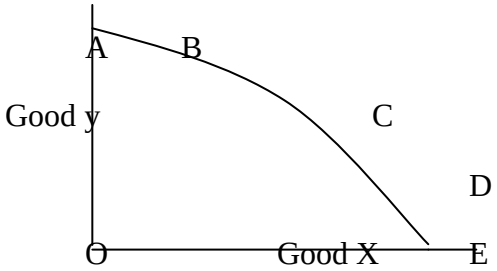
SUBJECT :ECONOMICS

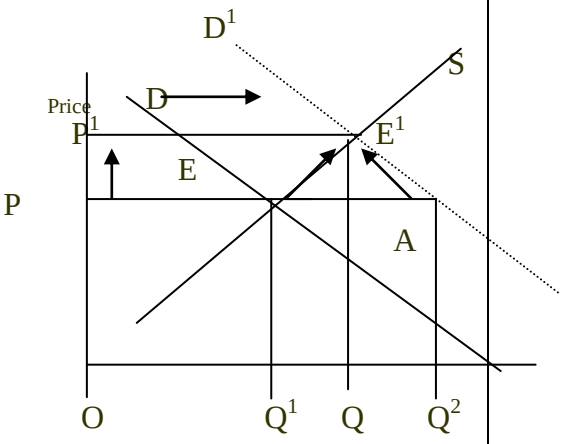
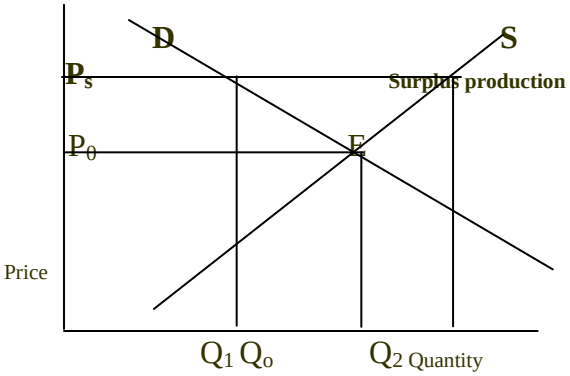
CLASS: XI **Sub. Code:030** **Time Allotted: 3 Hrs.**

14.02.2019 **SET C** **Max. Marks:80**

EXPECTED VALUE POINTS AND SCHEME OF EVALUATION

Q.NO.	Answers	Marks (with split up)
1	D. Decrease in price of the good	1
2	B. Price of good1 increases	1
3	MOC is the rate at which good Y is sacrificed for an additional unit of good X produced. OR The rate at which good2 is sacrificed for an additional unit of good1 is purchased or consumed.	1
4	MP becomes zero OR TFC remains constant	1
5	In perfectly competitive market, market price is constant and uniform. This gives total revenue curve the following features. a. TR increases as output increases b. TR has a constant slope, TR becomes an upward sloping straight line c. TR is zero at zero output so that it starts from origin OR If existing firms make abnormal profits in the short run, new firms will enter into the market attracted by the abnormal profits. Market supply increases. Price falls and abnormal profits are competed away. If existing firms are making loss, loss making firms can leave the market. Market supply decreases. Market price rises and the remaining firms will get normal profits. This implies that all firms will make only normal profits in the long run.	3
6	Ed=(ΔQ/ΔP) x (P/Q); 2 = (-1000 /x-20) x 20/500; 2=-100/(x-20)25; 2=-100/(25x-500); 2(25x-500)=-100; 50x-1000 = -100; 50x= 900; x = 900/50 **x=18. Ans=Rs.18**	3
7	Price of its substitute good falls. a. Good A is substitute of good B if an decrease in price of good B decreases the demand for good A. These are used one in place of the other and provide the same satisfaction and can be used with same ease. Demand for a good will shift to left (decrease) if price of its substitute falls. E.g. demand for tea and price of coffee. Price of complementary good falls b. Good A is said to be complementary to B if an decrease in price of good	2+2

	B increases the demand for good A. Complementary goods are those goods which are demanded together to satisfy one want. Demand for good will increase (shift to right) if price of complementary goods decreases. E.g. demand for car and price of petrol. With diagram	
8	In perfect competition price is constant. This makes AR constant. Every additional units are sold at the same price so that addition to total revenue will be equal to price only. This means AR=MR. When AR is constant MR coincides with AR. AR and MR curves becomes a horizontal straight line parallel to X axis.  	4
8	**PPC** is a graphical medium of highlighting the central problems of 'what to produce' It shows various combinations of two goods that can be produced with available technologies and with given resources, which are fully efficiently utilized. The curve that gives maximum amount of two goods that can be produced in the economy with given resources and technology is called production possibility frontier. Diagram  At the point A only Good Y is produced no good X. At the point E only good X is produced but no Y. Points B, C, and D, show various combinations of both the goods. Which combination to be produced, depends on the taste and preferences of the society. OR **Marginal Rate of Transformation:-** It is the rate at which quantity of output of one good sacrificed to produce one more unit of the other good. If MRT is increasing in nature, PPC will be concave to the origin If MRT is constant, MRT will be a straight line If MRT is diminishing, PPC will be convex to the origin (Show with diagram)	4
10	Tea and coffee are substitute goods.When market price of coffee rises demand for tea will increase. Consumers will shift from coffee to tea. Demand curve shifts to right. When demand shift top right equilibrium price increases and equilibrium quantity will increase.	6

	The direction of change in equilibrium price and quantity is same whenever there is a shift in demand curve. When demand shifts to right from DD to D^1D^1 the quantity demanded is more than the quantity supplied equal to 'EA' or (QQ^2) at OP price. Excess demand is created. Consumers are willing to pay a higher price. This pushes up the price to P1 A new equilibrium point is reached at E1. Equilibrium price increases to P^1 and equilibrium quantity to Q^2.  OR It is the minimum price fixed by the government above the market price on certain good is called price floor. Government fixes the minimum price in order to prevent the price falling from certain level so that the producers are assured of reasonable returns. This is also called price support programme.  P_o is equilibrium price at which demand=supply. If this price is too low for the producers so that they incur loss, government fixes a price floor or support price P_s. It has the following consequences. a. *Surplus production:-* At a higher price producers produce more but demand falls. This creates a surplus production equal to Q_1Q_2. b. *Buffer Stock*:- In order to keep the support price government has to procure this surplus at the floor price. This lead to creation of buffer stock c. *Problem of subsidies:-* Government buys the goods at the support price and sells at a lower price in the market. This price difference becomes subsidies. Government has to incur this cost of subsidies.	
11	A budget set describes the bundles that are available to the consumer. An indifference map shows her preferences over the available budget sets. Higher indifference curve shows higher level of satisfaction. A rational consumer always tries to move to the point on the highest indifference curve possible given her budget set. Budget Line represents all the possible bundles which cost exactly equal to the	6

consumer budget. Optimum point would be located on the budget line. A point below the budget line cannot be optimum. The point above the budget line is not available with the given income.

There could be some point on the budget line, which is preferred by the consumer. This optimum bundle of the consumer is located at the point where the budget line is tangent to the Indifference curve. At this point the absolute value of the slope of the IC (MRS) and that of the budget line (Price Ratio) are the same.

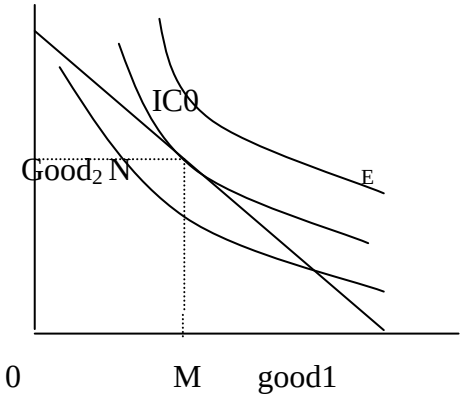
MRS=Price ratio. Or $\Delta X_2/\Delta X_1 = -P_1/P_2$

IC_1 IC_2

'AB' is the budget line. At the point 'E' Budget line touches the highest possible IC

Consumer buys ON units of $good_2$ and

OM units of good. And OM units of good1

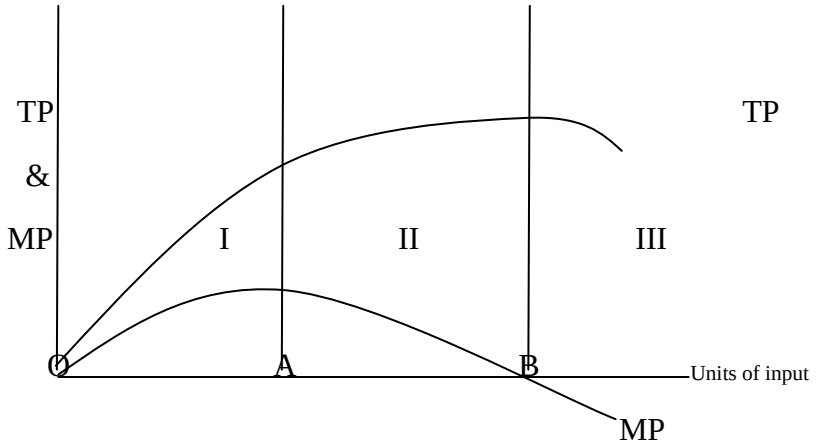


12

6

Law of Returns to an Input (Law of Variable Proportion):-

This law reveals about the contribution of a single factor towards production. In this law we vary the employment of only one factor keeping the employment of other factors other factors fixed. This law states that MPP initially increases with the increase in the employment of the input in question, then it diminishes and finally it becomes negative. This pattern of MPP is called law of variable proportion. This law outlines three stages of production



Stage I: When the level of employment of an input is sufficiently low, its MP increases;

TP increases at an increasing rate. This stage ends at the point when MP reaches maximum. This stage is also known as the stage of increasing returns.

Stage II: MP diminishes but remains positive. TP will increase but at a diminishing rate. At the end of this stage MP is zero and TP reaches maximum and remain constant. This phase is also called diminishing returns.

Stage II: MP becomes negative. TP starts to decline. This phase is also called the stage of negative returns

PART B STATISTICS

13 (1)

Discrete series: It can take only certain values than change only by finite jumps
Continuous series: Series capable of manifesting every conceivable value and its value can also be broken into infinite gradations

OR

Chronological classification: classification of data according to time
Spatial classification: Data classified according to Geographical location

14 (1)

It is the case of perfect positive correlation. The values of both the variables change in the same direction and in the same proportion.

15 (1)

D.The class mid points

16 (1)

Arithmetic mean is base on all items so that it is more representative in nature. Median ignores extreme values in its calculation.

17 (3)

Calculate Arithmetic Mean for the following distribution.

Score less than	20	40	60	80	100	120
Number of students	4	10	30	40	47	50
Classess	0-20	20-40	40-60	60-80	80-100	100-120
X	10	30	50	70	90	110
Frequency	4	6	20	10	7	3
Fx	40	180	1000	700	630	330

$\sum Fx=2880$

Mean $=\sum f$; $2880/50 = 57.6$

OR

Calculate First Quartile, Second Quartile and Third Quartile for the following distribution

Marks	15	25	35	45	55	65	75	85
Number of students	4	6	10	18	10	7	6	3
Cf	4	10	20	38	48	55	61	64

18 (3)

Production
Consumption
Distribution
(with meaning)

19 (4)

Essential characteristics of a good questionnaire:

a. A questionnaire should not be too long.
b. Series of questions should move from general to specific
c. The questions should be precise and clear
d. Questions should not be ambiguous to enable the respondents to answer quickly
e. Questions should not use double negative

	f. Questions should not be a leading question g. Questions should not indicate alternative to answer. (any four points) OR Sampling error: the difference between actual value of parameter of the population and its estimate Non-sampling error: All errors other than sampling error. More serious because it is difficult to minimize non sampling error whereas sampling error can be minimized by taking larger number of samples. a. Errors in data acquisition b. Non response errors c. Sampling bias (with meaning)	
20	Find product moment correlation using the method of Karl Pearson's coefficient of correlation for the following data related Values of X and Values of Y. Values of X: 2	3	5	6	9 Values of Y: 6	5	7	8	14 Dx: -3	-2	0	1	4 Dy: -2	-3	-1	0	6 dx.dy: 6	6	0	0	24/ 36 Dx^2: 9	4	0	1	16 / 30 Dy^2: 4	9	1	0	36/ 50 $\bar{X} = \sum X/N = 25/5 = 5$; $\bar{Y} = \sum Y/N = 40/5 = 8$ $r = \sum dx.dy/\sqrt{dx^2.dy^2} = 36/\sqrt{30x50}$; r= 0.92	4
21	**Sectors** — **Expenditure (Rs. Crores)** — **%** — **Degree** Agriculture 1400 28 100.8 Animal Husbandry 1250 25 90 Fisheries 700 14 50.4 Forestry and Logging 600 12 43.2 Mining and Quarrying 1050 21 75.6 Total 5000 100 360 Diagram	4
22	Calculate the value of Mode and locate the same on a graph and verify the result. Classes: 0-2 | 2-4 | 4-6 | 6-8 | **8-10** | 10-12 | 12-14 | 14-16 | 16-18 | 18-20 frequencies: 6 | 16 | 28 | 60 | 80 | 56 | 28 | 16 | 6 | 4 Model class = 8-10 mode = l + (fm-f1)/(2fm-f1-f2) x c =8+ (80-60)/2x80-60-56) x 2; 8 + (20/44) x 2 ; 8 = 0.91; **9 appx** **Graph of histogram and location.**	
23	Calculate Mean Deviation from median and its coefficient for the following distribution	6

Classes	5	15	25	35	45	
Frequencies	8	12	15	9	6 ∑f=50	
CF	8	20	35	44	50	
/d/	20	10	0	10	20	
f/d/	160	120	0	90	120 ∑f/d/=490	

Median N/2th item; 50/2 =25th item. Median = 25
M.D = (∑f/d/)/∑f; 490/50 **= 9.8**
Coefficient of M.D = M.D./Median; 9.8/25; =**0.39**

OR

Calculate Standard Deviation and its coefficient.

Classes	5 – 15	15 - 25	25 - 35	35 – 45	45 - 55
Frequencies	8	12	15	9	6 ∑F =50
X	10	20	30	40	50
Fx	80	240	450	360	300/=1430
D (X-28.6)	-18.6	-8.6	1.4	11.4	21.6
D2	345.96	73.96	1.96	129.96	466.56
Fd2	2767.68	887.52	29.4	1169.64	2799.36 ∑Fd2=7653.6

$\bar{X}$ =∑fx/∑f = 1430/50 = 28.6
SD = √∑Fd2/∑F; √7653.6/50 = √153 = 12.36

Coefficient of SD = Sd/$\bar{X}$ = 12.36/28.6 =0.43

24 — 6

a. Laspeyer's Method.
b. Paasche's Method.

	2005		2010						
Commodities	P0	Q0	P1	Q1	P0q0	P1q0	P1q1	P0q1	
A	40	5	60	5	200	300	300	200	
B	50	6	75	8	300	450	600	400	
C	90	8	100	10	720	800	1000	900	
D	20	5	30	6	100	150	180	120	
Total					1320	1700	2080	1620	

a. P01 = ∑P1q0/∑P0q0 x 100; (1700/1320) x 100 = 128.79
b. P01 = ∑P1q1/∑P0q1 x 100; (2080/1620) x 100 = 128.4

END OF THE PAPER — 6